DRAFT

UDC Business Rule Comparison

Process #1 - Bundled Customer (meter exchange required) to Direct Access

UDC Process Description	SRP	TEP	APS	Navopache
Assumptions:	**Phase I** (now until 12/31/00)– Customers with loads of 1mW and above are eligible for competitive metering (MSP). **Phase II** (12/31/00 and beyond) All customers are eligible for competitive metering. Customers with yearly loads of 100,000 kWh and above require installation of IDR metering. SRP can continue to provide metering services upon request.	Customers with loads greater than 20 kW require IDR metering. TEP will no longer provide MSP services to any DA commercial customers or residential customers with loads greater than 20kW.	Customers with loads greater than 20 kW require IDR metering. APS will no longer provide MSP services to any DA commercial customer or residential customers with loads greater than 20kW.	Customers with loads greater than 20 kW require IDR metering. Coops can provide MSP services to any DA commercial customer or residential customers as long as they are not competing outside of the service territory R14-2-1615C.
Step 1 – ESP Sends Enrollment DASR *(#1 in Meter Data Element Comparison Document)*	ESP Services receives DASR and forwards pertinent information via SRP's CIS system to Metering SPC.	ESP Services receives DASR and forwards metering information to TEP's Meter Shop SPC.	MAC (Meter Activity Coordinator) receives DASR information electronically from ESP Services.	ESP provides DASR 5 workdays prior to switch. MSP must give 5 days notice of joint meet.
Step 2 – UDC sends existing meter attributes etc. to MSP/ESP *(#2 in Meter Data Element Comparison Document)*	Metering SPOC sends MI and purchase order if applicable to MSP/ESP via email or fax. Excel document **Timing Requirements:** Sent within 3 workdays of receiving DASR information	Meter Shop sends the MI and purchase order if applicable to ESP or MSP via email or fax. Excel document or PDF. **Timing Requirements**: Sent within 5 workdays of receiving DASR information.	APS MAC send page 1 and 2 of MAC form and purchase order if applicable to MSP/ESP via email or fax. (PDF form). **Timing Requirements:**	NEC Metering sends the MI to ESP/MSP via email or fax. Excel document or PDF. **Timing Requirements**: Sent

			Sent within 3 workdays of receiving DASR information.	within 3 workdays of receiving DASR information.
Step 2.1 – What is the period of time that an MSP can not exchange the meter? **(Blackout Window)**	No blackout window	An MSP cannot exchange a meter 5 calendar days prior to a read date.	An MSP can not exchange the meter 6 workdays prior to the first APS read date, through the read window. The read window can be 3-5 workdays	An MSP can not exchange a meter 5 calendar days prior to read date.
Step 2.2 – What is the process for handling the purchase of CT and PT (VT).	**Who may own?** SRP, ESP, MSP or customer **Are there voltage restrictions?** Zero up to and including 600 volts, SRP, MSP, ESP and customer may own equipment. Greater than 600 volts up to and including 25 kV, SRP, MSP, ESP may own equipment. Greater than 25 kV, SRP will own equipment. Exception: SRP will not sell	**Who may own?** TEP, ESP, MSP or customer **Are there voltage restrictions?** Zero up to and including 600 volts, TEP, MSP, ESP and customer may own equipment. Greater than 600 volts up to and including 25 kV, TEP, MSP and ESP may own equipment. Greater than 25 kV, TEP will own equipment. Exception: TEP will not sell	**Who may own?** APS, ESP, MSP or customer **Are there voltage restrictions?** Zero up to and including 600 volts, MSP, ESP and customer may own equipment. Greater than 600 volts up to and including 25 kV, MSP and ESP may own equipment. Greater than 25 kV, APS will own equipment. Exception: APS will not	**Who may own?** Navapache only **Are there voltage restrictions?** N/A **Buying equipment:** N/A **What are the costs?** N/A

	equipment in the dedicated SRP owned substations regardless of voltage classification. Customer owned substations would be considered on a case by case basis. **Buying equipment: -** An Equipment Purchase Order will be sent with the MI, which will include equipment pricing and information. • **Meter –** SRP will sell new and existing meters. • **CT/PT –** SRP will sell new (from stock) and existing CT/PT (VT) • **Associated Equipment -** SRP will sell new (from stock) and existing Associated Equipment **What are the costs?** **What happens if the MSP finds that the existing CT/PT (VT) equipment is damaged before exchange is done?**	CT/PT (VT) equipment located in TEP dedicated substations regardless of voltage classifications. Customer owned substations would be considered on a case by case basis. **Buying equipment:** An Equipment Purchase Order will be sent with the MI which will include equipment pricing and information. • **Meter –** TEP will sell new meters out of stock • **CT/PT -** TEP will sell new (from stock) and existing CT/PT (VT) • **Associated Equipment -** TEP will sell new (from stock) and existing Associated Equipment **What are the costs?** <u>New Equipment</u> Cost of new meter + $5.00 handling fee	sell equipment in the dedicated APS owned substations regardless of voltage classification. Customer owned substations would be considered on a case by case basis. **Buying equipment:** An Equipment Purchase Order will be sent with the MAC Form, which will include equipment pricing and information. • **Meter –** APS will sell new meters out of stock • **CT/PT –** APS will sell new (from stock) and existing CT/PT (VT) • **Associated Equipment -** APS will sell new (from stock) and existing Associated Equipment **What are the costs?**	**What happens if the MSP finds that the existing CT/PT (VT) equipment is damaged before exchange is done?** Joint meeting required to perform accuracy test of instrument transformers.

	Call Single Point of Contact (SPOC) for coordination of work and SPOC will generate a field order. SPOC will contact MSP when work is complete. **Who is responsible for maintenance of CT/PT (VT)?** The owner of the equipment is responsible for maintenance of CT/PT (VT).	<u>Installed equipment</u> **What happens if the MSP finds that the existing CT/PT (VT) equipment is damaged before exchange is done?** Call TEP Meter Shop for coordination of work and they will generate a field order. The Meter Shop will contact the MSP when the work is complete. **Who is responsible for maintenance of CT/PT (VT)?** The owner of the equipment is responsible for maintenance of CT/PT (VT).	<u>Installed equipment:</u> Material/labor minus 5-year depreciation. **What happens if the MSP finds that the existing CT/PT (VT) equipment is damaged before exchange is done?** Call APS MAC for coordination of work and MAC will generate a field order. MAC will contact MSP when work is complete. **Who is responsible for maintenance of CT/PT (VT)?** The owner of the equipment is responsible for maintenance of CT/PT (VT).	

Step 3 – MSP/ESP sends scheduling information to UDC *(#3 in Meter Data Element Comparison Document)*	MSP returns MI form (bottom half of form) to SPC with estimated scheduling information and pending ownership info. Additional phone coordination is required for site meets. **Timing Requirements**: **Return of Form:** The MI form and the Purchase Order must be returned at least 3 working days prior to the exchange.	MSP sends the MI form back with ownership changes and metering options indicated. Additional phone coordination is required for site meets. **Timing Requirements:** **Return of Form:** The MI form and Purchase Order must be returned 5 workdays prior exchange or install date.	MSP sends page 1 of MAC form back to APS with estimated scheduling information and pending ownership information and signed equipment purchase orders. Additional phone coordination is required for site meets. **Timing Requirements:** **Return of Form:** The MAC Form and the Purchase Order must be returned at least 5 working days prior to the exchange.	MSP sends MI form back with ownership changes and metering options indicated. Additional phone coordination is required for site meets. **Timing Requirements**: The MI form must be returned 5 workdays prior to exchange or installation date.
Step 3.1 – MSP exchanges meter – When does ESP take responsibility for meter/customer?	In SRP service territory, all MSP metering must be complete 10 workdays prior to the actual DA switch date. Therefore, SRP is still responsible for billing the generation consumption until the switch date. The ESP takes responsibility the first minute after midnight on the switch/read date.	ESP takes responsibility upon removal of TEP meter.	ESP takes responsibility for meter/customer the first full 15 minute interval for a commercial customers with loads over 20 kW, that the new meter is in the socket. For customers with residential loads under 20 kW, the ESP would be responsible for the first	When the final meter reading is taken, or at 12:01 on the first day of the next billing cycle following meter exchange.

	If a meter exchange takes place after the switch, the ESP takes responsibility for billing the generation consumption.		60 minute interval.	
Step 3.2 –Who is responsible for the usage while the meter is out of the socket during the exchange?	If the switch to DA has not yet taken place (see step 3.1), SRP is responsible for calculating lost registration while the meter is out of the socket. If the switch to DA has already taken place, the MSP is responsible for calculating the lost registration. The method we suggest for calculating the lost registration- Take current registration for a certain period of time, beginning and end. Stopwatch check. # of Revolutions X Kh X 3.6 Time in Seconds This should give the kW X multiplier.	ESP takes responsibility of consumption once MSP removes TEP meter.	If the meter is out of the socket during the exchange greater than 15 minutes, APS requires the MSP to calculate the "lost registration" and add it to the out-read on the APS meter. A stopwatch check will be used to calculate lost registration.	ESP/MSP is responsible after the UDC meter has been removed.

Step 4 – MSP/ESP sends information about newly installed meter and required UDC meter information to the UDC. *(#4 in Meter Data Element Comparison Document)*	**Timing Requirements**: **Return of Form:** MSP must return the Exchange/Removal/Read form within 2 workdays after install day. This form can be returned by email or fax. **Return of Meter:** The SRP meter must be returned within 5 workdays after the install date. The meter must shipped or delivered to the 1 office listed on form or website. **Charge for damaged SRP equipment or equipment not returned:** SRP will charge the remaining net book value of the meter.	**Timing Requirements**: **Return of Form:** MSP must return the Meter Activity Form within 3 workdays of install or exchange. **Return of Meter:** The meter must returned to TEP within 15 calendar days of removal. This form can be returned by email or fax. The meter can be shipped or dropped off at 2 offices listed on website. **Charge for damaged TEP equipment or equipment not returned:** Original purchase price of equipment	**Timing Requirements:** **Return of Form:** MSP must return Page 2 of the MAC form no later than 3 working days from the day of the exchange. Additionally, the form must be returned before the Blackout Window. **Return of Meter:** The meter must be returned to APS within 15 workdays of removal. This form can be returned by email or fax. The meter can be shipped or dropped off at 5 offices listed on form and website. **Charge for damaged APS equipment or equipment not returned:** Replacement cost minus 5 years depreciation plus 15% handling fee	**Timing Requirement:** MSP must return meter activity form within 5 calendar days. This form may be returned by fax or email.
Step 5 – Billing ESP, MSP,	SRP will bill ESP, MSP or	TEP will bill ESP, MSP or	APS will bill ESP, MSP or	NEC will bill

customer for equipment, work performed, non-returned meters, site meet charges, etc.	customer at least monthly for equipment, work performed, non-returned meters, site meet charges, etc from the previous month.	customer at least monthly for equipment, work performed, non-returned meters, site meet charges, etc from the previous month.	customer at least monthly for equipment, work performed, non-returned meters, site meet charges, etc from the previous month.	ESPs/MSPs once per month for all equipment and work performed from the previous month.
MISC BUSINESS PROCESSES:	**SRP**	**TEP**	**APS**	**Other**
Handling of Load Research for customers going DA	SRP will select another sample. Load research meters interrogated by phone utilize the customer's phone lines. SRP may lease SRP phone lines.	TEP will select another sample. TEP will not allow third parties to use TEP owned phone lines.	APS will select another sample. They will disconnect any APS dedicated phone line.	NEC will select another sample and will disconnect any communications hardware.
Site Meet & Scheduling Policy	**When is site meet required?:** Site meets are required for all SRP owned dedicated substations and may be required for customer loads 1 mW or greater or when other special metering equipment is in place, at the discretion of the SRP. **Scheduling:** MSP returns MI form to SPOC with estimated scheduling information and pending	**When is site meet required?:** Site meets are required for all TEP owned dedicated substations and may be required for customer loads 1 mW or greater or when other special metering equipment is in place, at the discretion of the TEP. **Scheduling:** MSP returns the MI form with estimated scheduling information and pending	**When is site meet required?:** Site meets are required for all APS owned dedicated substations and may be required for customer loads 1 mW or greater or when other special metering equipment is in place, at the discretion of the APS. **Scheduling:** MSP returns Page 1 of	

	ownership information. Additional phone coordination is required for site meets. Timing Requirements: Form must be returned at least 3 working days prior to the exchange. **Site Meet Charges:** SRP will charge $25.00 per site for site meets requested by SRP or MSP. **Changes to Schedule:** If there are changes to the anticipated meter exchange time/date – the MSP must notify SPOC of changes to their schedule by 2 p.m. (Arizona Time), 1 workday prior to the exchange date. **MSP Missed Appointment:** Per protocol we can charge the ESP 1-hour labor time ($85) for failure to show. We recommend the journeyman would consider the site meet a no show after waiting at the site for 15 minutes past agreed meeting time. This charge includes 15 minutes waiting time and 30 minutes travel time	ownership information. Additional phone coordination is required for site meets. Timing Requirements: Form must be returned at least 5 working days prior to the exchange. **Site Meet Charges:** TEP will charge $37.00 per hour during normal working hours (6:00 a.m. to 2:30 p.m.) and $55.00 during after hours (2:31 p.m. to 5:59 a.m.) **Changes to Schedule:** If there are changes to the anticipated meter exchange time/date – the MSP must notify TEP of changes to their schedule by 2 p.m. (Arizona Time), 1 workday prior to the exchange date. **MSP Missed Appointment:** If the MSP fails to arrive within 30 minutes of the appointment time, or if the MSP fails to cancel at least one working day in advance, TEP will charge $37.00 for missed appointments during working hours and $55.00 for after hour appointments.	MAC form and EPO with estimated scheduling information and pending ownership information. Additional phone coordination is required for site meets. Timing Requirements: Form must be returned at least 5 working days prior to the exchange. **Site Meet Charges:** APS may charge ESP $30.00 per site for Phoenix Metropolitan area and $75.00 per site for all other areas for a site meet requested by MSP. APS may assess an additional charge of $30.00 per hour for site meets that exceeds 30 minutes. **Changes to Schedule:** If there are changes to the anticipated meter exchange time/date – the MSP must notify APS of changes to their schedule by 2 p.m. (Arizona Time), 1 workday prior to the exchange date.	

	to and from site and 15 minutes penalty. The journeyman will leave a meter tag/hanger telling the MSP whom to contact for rescheduling the appointment. When possible a next day site meet can be coordinated. **SRP Missed Appointment:** 1-hour of labor time will be credited to the ESP's account. The MSP must leave a meter tag indicating that they were at the site. The MSP must wait 15 minutes past the agreed upon time before the appointment can be considered a no-show.	**TEP Missed Appointment:** The ESP/MSP may charge TEP based on the same conditions set forth in TEPs requirements of the ESP/MSP.	**MSP Missed Appointment:** If the MSP fails to arrive within 30 minutes of the appointment time, or if the MSP fails to cancel at least one working day in advance, APS may charge $30.00 per site for Phoenix Metropolitan area and $75.00 per site for all other areas. **APS Missed Appointment:** No current policy exists	

Access Issues /Key Process Issues: Keys cannot be copied Liability – customer auth. Locking types: double hasp Lock boxes, utility locks, etc.	**Customer Access Issues:** MSP will need to make arrangements with the customer to gain access to customers' metering equipment. SRP will be unable to provide customer keys to MSPs/ESPs. In order to ensure necessary site access in the event of an emergency, the MSP must notify SRP within 3 working days of any changes in meter access at a customer site. **Utility Access Issues:** If there is just an SRP lock at the site, the MSP will be charged a standard hourly rate (See Services & Fees) to cut the lock in lieu of a site meet. The MSP will install a square D padlock hasp in order to accommodate the MSP and SRP lock. The MSP will also need to install a _____ seal with their name or logo on the seal where the SRP lock would normally be installed in order to properly secure the padlock hasp. The MSP must advise us on the Exchange/Removal/Read form that the lock was cut.	**Customer Access Issues:** MSP will need to make arrangements with the customer to gain access to customers metering equipment. TEP will be unable to provide customer keys to MSPs/ESPs. **Utility Access Issues:** If there is just a TEP lock at the site, the MSP will be charged the cost of the lock plus $5.00 admin. and handling fee to cut the lock in lieu of a site meet. The MSP will install a square D padlock hasp or chain in order to accommodate the MSP and TEP lock. The MSP will also need to install an orange seal with their name or logo on the hasp where the TEP lock would normally be installed in order to properly secure the padlock hasp. The MSP must advise us on the MA form that the lock was cut. **Note**: If MSP installs their own lock, a square D padlock hasp is required.	**Customer Access Issues:** MSP will need to make arrangements with the customer to gain access to customers metering equipment. APS will be unable to provide customer keys to MSPs/ESPs. In order to ensure necessary site access in the event of an emergency, the MSP must notify APS within 3 working days of any changes in meter access at a customer site. **Utility Access Issues:** If there is just an APS lock at the site, the MSP will be charged the cost of the lock plus 15% handling fee to cut the lock in lieu of a site meet. The MSP will install a square D padlock hasp in order to accommodate the MSP and APS lock. The MSP will also need to install a blue seal with their name or logo on the hasp where the APS lock would normally be	NEC will not provide any utility keys to ESP/MSP. NEC prefers double hasp.

	Note: If MSP installs their own lock, a square D padlock hasp is required.		installed in order to properly secure the padlock hasp. The MSP must advise us on page 2 of the MAC form that the lock was cut. **Note**: If MSP installs their own lock, a square D padlock hasp is required.	